BUDAY, R. [Budai, R.]; GALAKTION-NITSELYA, O. [Galaction-Nitelea, O.];
CHURYA, Ye. [Ciurea, E.]

Refsum's disease heredopathia atactica polyneuritiformis. Zhur. nevr. i psikh. 65 no.8:1139-1142 '65. (MIRA 18:8)

1. Institut nevrologii im. Pavlova (direktor - akademik A. Kreyndler), Bukharest.

GALACTIONOV, V.

"From the Volga to the Ural", p. 16 (Stinta Si Cultura, Vol. 5, no. 5, May 1953, Bucuresti)

East European Vol. 2, No 9
SO: Monthly List of ~~[illegible]~~ Accessions,/ Library of Congress, September 1953, Uncl.

KOPASZ, Erno, dr.; GALAGZ, Lajos, dr.; TIMAR, Karoly, dr.

Relation of circulatory disorders to malignant tumors. Magy. onkol. 6 no.2:115-124 My '62.

1. Veszprem Megyei Tanacs Korhaza.
(CARDIOVASCULAR DISEASES) (NEOPLASMS)

GALADUSHKA, B.Z. [Haladushka, B.Z.]

Ecology of the dwarf eagle (Aquila pennata Gmel.) in Byalovezhska Pushcha. Vestsi AN BSSR. Ser. biial. nav. no.1:114-117 '59.
(MIRA 12:7)

(Byalovezhska Pushcha--Eagles)

GALADZHEV, R.S.; GAFANOVICH, A.A.; KABANOV, Ye.Ye.; KATAR'YAN, Ye.S.

Investigating the strength of threshing drum shafts in combines. Trakt. i sel'khozmash. no.2:24-28 F '58. (MIRA 12:3)

1. Rostovskiy zavod sel'skokhozyaystvennogo mashinostroyeniya. (Combines (Agricultural machinery))

GALADZHEV, R.S.; SAVIN, V.I.; KATAR'YAN, Ye.S.

Calculations for a mounted overshot straw and hay stacker.
Trakt. i sel'khozmash. 31. no.7:23-25 Jl '61.
(MIRA 14:6)
(Harvesting machinery)

GALADZHEV, R.S.; KATAR'YAN, Ye.S.; GARANKINA, S.P., red. izd-va;
TIKHANOV, A.Ya., tekhn. red.

[Geometrical characteristics of plane cross sections; reference tables] Geometricheskie kharakteristiki ploskikh sechenii; spravochnik tablitsy. Moskva, Mashgiz, 1963. 181 p.
(MIRA 16:5)

(Geometry, Plane—Tables, etc.)

GALADZHEV, R.S.; GAFANOVICH, A.A.

Increasing the serviceability of the V-belt speed variator of the SK-4 combine. Trakt. i sel'khozmash. 33 no.12:20-23 D '63. (MIRA 17:2)

1. Rostovskiy zavod sel'skokhozyaystvennogo mashinostroyeniya (for Galadzhev). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennogo mashinostroyeniya (for Gafanovich).

GALADZHEV, R.S.

Determining actual stresses exerted on a pulley by a V-belt. Trudy NPI 149:105-111 '63.

(MIRA 17:4)

STROKOV, S.A.; GALADZHEV, R.S.; ZARGARYAN, S.R.; RUBLEV, V.S.

Working out a design of the frame of the SPM-200 stacker.
Trakt. i sel'khozmash. no.1:21-23 Ja '64. (MIRA 17:4)

1. Gosudarstvennoye spetsial'noye konstruktorskoye byuro Rostovskogo zavoda sel'skokhozyaystvennogo mashinostroyeniya.

GALADZHEV, R.S.

Creep of V-belts under operational conditions. Kauch. i rez. 23 no.6:47-50 Je '64. (MIRA 17:9)

1. Gosudarstvennoye spetsial'noye konstruktorskoye byuro pri zavode "Rossel'mash".

GALADZHEV, R.S.; ZAKHAROV, S.P.; KOVALEV, N.M.; GAFANOVICH, A.A.

Studying the reliability of pneumatic tires for loading machines. Trakt. i sel'khozmash. no.11:23-25 N '64.

(MIRA 18:1)

1. GSKB Rostovskogo zavoda sel'skokhozyaystvennogo mashinostroyeniya (for Galaczhev). 2. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (for Kovalev). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennogo mashinostroyeniya (for Gafanovich).

GALADZHEV, R.S.

Using the methods of electric strain measurements in investigating the deformations of V-belts. Trudy NPI 153:35-42 '64. (MIRA 18:12)

CHUBUKOV, A.A., inzh.; KAGAN, J.L., inzh.; GALADZHEVA, M.Ya., inzh.;
KRAVTSOV, B.M., inzh.; MERKULOV, B.A., inzh.

The OSN-12 automatic welder for welding girth joints. Svar. proizv. no.4:37-38 Ap '65. (MIRA 18:6)

1. Rostovskiy-na-Donu nauchno-issledovatel'skiy institut tekhnologii mashinostroyeniya.

MAMAYEVA, Ye.A.; SUMAROKOV, A.A.; BONDARENKO, M.P.; GALADZHEVA, Ye.S.

Comparative study of immunological changes in revaccination with pertussis and pertussis-diptheria vaccine. Zhur. mikrobiol., epid. i immun. 40 no.9:10-14 '63. (MIRA 17:5)

1. Iz Moskovskogo instituta epidemiologii i mikrobiologii.

Galadzhiy, F.M.

4871. PORTABLE INSTRUMENT FOR MEASURING CONCENTRATION OF COAL DUST. Galadzhii, F. M. (Ugol (Coal), July 1951, 31, 32). The instrument described used a red light filter and a photo-electric cell. (L).

GALADZHIY, F.M., starshiy nauchnyy sotrudnik; BOBROV, I.V., kandidat tekhnicheskikh nauk.

Experience in conducting blasting operations with millisecond retardation. Ugol' 29 no.5:7-11 My '54. (MLRA 7:6)

1. MakNII. (Blasting)

M

SELEZNEV, Andrey Ivanovich; GALADZHIY, Fedor Mikhaylovich; KUBENEV, Kh.
redaktor; GRISHAYENKO, M.T., redaktor; NADEINSKAYA, A.A. tekhnicheskiy redaktor.

[Stemming bore holes in underground blasting (in coal mines)]
Vnutrenniaia zaboika shpurov pri vzryvnykh rabotakh (v ugol'nykh
shakhtakh). Moskva, Ugletekhizdat, 1955. 24 p. (MLRA 8:8)
(Blasting)

GALADZHIY, F.M., inzh.

Burning out of explosives in blast holes. Bezop.truda v prom. 3 no.8:9-12 Ag '59. (MIRA 12:11)

1. Nachal'nik otdela vzryvchatykh materialov i vzryvnykh rabot Makeyevskogo nauchno-issledovatel'skogo instituta.
(Coal mines and mining--Explosives)

MAGOYCHENKOV, Maksim Alekseyevich; GALADZHIY, Fedor Maksimovich;
ROSINSKIY, Nikolay Leonidovich; DEMIDYUK, G.P., retsenzent;
ASSONOV, V.A., otv. red.; RATNIKOVA, A.P., red. izd-va;
LOMILINA, L.N., tekhn. red.; SHKLYAR, S.Ya., tekhn. red.

[Blasting foreman]Master-vzryvnik. Moskva, Gosgortekhizdat,
1962. 287 p. (MIRA 15:8)
(Blasting)

GALADZHIY, Fedor Maksimovich; RATNIKOVA, A.P., red. izd-va;
MESHCHANKINA, I.S., tekhn. red.

[Safety measures in mine blasting]Bezopasnost' vzryvnykh rabot v shakhtakh. Moskva, Gosgortekhizdat, 1962. 133 p.
(MIRA 16:2)
(Mines and mining—Safety measures) (Blasting)

GALADZHIY, F.M.

New safety measures in blasting operations. Trudy MakNII 10:177-231 '60. (MIRA 15:10)
(Blasting—Safety measures)

GALADZHIY, F.; STIKACHEV, V., starshiy nauchnyy sotrudnik

Comments on M. Z. Burov's article "Improve the methods and means for blasthole drilling." Bezop. truda v prom. 6 no.9:30 S '62. (MIRA 16:4)

1. Nachal'nik otdela vzryvchatykh materialov i vzryvnykh rabot Makeyevskogo nauchno-issledovatel'skogo instituta po bezopasnosti rabot v gornoy promyshlennosti (for Galadzhiy).

(Boring) (Burov, M. Z.)

GALADZHIY, F.M., kand.tekhn.nauk; PESOTSKIY, M.K., inzh., starshiy nauchnyy sotrudnik

Safety medium in blasting. Bezop.truda v prom. 6 no.11:32-34 N '62.
(MIRA 16:2)

1. Nachal'nik otdela vzryvnykh rabot Makeyevskogo nauchno-issledovatel'skogo instituta po bezopasnosti rabot v gornoy promyshlennosti (for Galadzhiy).

(Blasting—Safety measures)

GALADZHIY, F.M., kand. tekhn. nauk; POPOV, I.I., inzh.; ZENIN, V.I., inzh.

Study of the causes of the failure of reliable detonations of borehole charges with safety explosives in group blasting of coal. Vzryv. delo no.51/8:331-345 '63. (MIRA 16:6)

1. Makeyevskiy nauchno-issledovatel'skiy institut.
(Coal mines and mining) (Blasting)

GALADZHIY, F.M.; ZENIN, V.N.; VAYNSHETYN, B.I.

Improving the methods of measuring the detonation velocity. Vzryv. delo no.52/9:108-114 '63. (MIRA 17:12)

1. Makeyevskiy nauchno-issledovatel'skiy institut po bezopasnosti truda v gornoy promyshlennosti.

L 13755-65 EWT(1)/FCC ASD(f)-2/ESD(t) GW S/0169/64/000/008/B039/B040

ACCESSION NR: AR4046160 B

SOURCE: Ref. zh. Geofizika, Abs. 8B226

AUTHOR: Tkachenko, A. V., Volevakha, N. M., Galadzhiy, N. M.

TITLE: Experience in analysis of a wind velocity hodograph in the boundary layer of the atmosphere

CITED SOURCE: Tr. Ukr. n.-i. gidrometeorol. in-ta, vy*p. 31, 1962, 48-53

TOPIC TAGS: wind velocity, atmospheric boundary layer, geostrophic wind, thermal wind, atmospheric turbulence, optical analyzer, atmospheric front

TRANSLATION: On the basis of wind sounding data from Kiev (74 hodographs in 1957 and 71 in 1960), the authors checked the practical applicability of the use of an optical analyzer of the wind velocity godograph for determination of the geostrophic and thermal wind and the turbulence coefficient. It was found that the use of an optical analyzer increases the possibility of the analysis of wind sounding data in comparison with methods in which it is assumed that there is no thermal wind. The method described gives good results when there are no atmospheric fronts on the synoptic chart near the sounding point. In only 50%

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ACCESSION NR: AR4046160

of the cases is it possible to use this method, and in the daytime in summer when the condition of a stationary state of the atmospheric boundary layer is satisfied. The velocity and direction of the geostrophic wind computed by this method agree well with similar values determined from a surface weather chart. The determination of the coefficient of turbulent viscosity was made by two methods; for the most part the results agree with data obtained by other authors. It was not possible to establish an interrelationship between the computed thermal wind and the theoretical wind using an OT-500/1000 chart. R. Onikul

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut (Ukrainian Hydrometeorological Scientific Research Institute)

SUB CODE: ES ENCL: 00

Card 2/2

ACCESSION NR: AT4018985 S/2599/63/000/036/0033/0039

AUTHOR: Galadzhiy, N. M.; Tkachenko, A. V.

TITLE: Experience in determining the turbulence coefficient in the atmospheric boundary layer on the basis of data from wind sounding at a single station

SOURCE: Kiev. Ukr. n.-i. gidrometeor. institut. Trudy*, no. 36, 1963. Voprosy* fiziki atmosfery* (Problems in atmospheric physics), 33-39

TOPIC TAGS: meteorology, turbulence coefficient, atmospheric turbulence, wind, weather forecasting

ABSTRACT: The method for determining the turbulence coefficient k in the atmospheric boundary layer on the basis of data from wind sounding at a single station has been described earlier (Tr. UkrNIGMI, No. 31, 1962). Investigations were made at Krivoy Rog in the winter of 1961 to determine the validity of the method. Empirical data indicate that beginning at some height h (100-200 m above the earth's surface) the turbulence coefficient changes little with height z. For z $\gg$ h it is assumed that k(z) = const. Under these conditions and assuming that the velocity of the geostrophic wind and acceleration are linear functions of height, the method proceeds on the basis of Laykhtman's equations of motion:

$$\left.\begin{aligned} u &= e^{-\lambda z}(C_x \cos\lambda z + C_y \sin\lambda z) - (A_y + zB_y) \\ v &= e^{-\lambda z}(C_y \cos\lambda z - C_x \sin\lambda z) + (A_x + zB_x) \end{aligned}\right\} \quad (1)$$

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ACCESSION NR: AT4018985

Where u, v are wind velocity components, A_x, A_y, B_x, B_y, C_x, C_y are unknown constant values, functions of velocity of the geostrophic wind at the earth's surface, characteristics of the thermal wind; λ is a value related to the turbulence coefficient by the relation

$$k = \frac{\omega \sin \varphi}{\lambda^2} \qquad (2)$$

where ω is the angular velocity of the earth's rotation, φ is latitude of the place. The problem of determination of k requires finding of λ. Two computation schemes from the earlier paper are presented, of which one is not recommended, and a new scheme presented; both are suitable for determining λ and k. A total of 228 soundings were made; a wind velocity hodograph and a graph of the sums of distances between points were constructed for each case. Only 75 cases satisfied the criteria set by the authors. The value λ was determined in each case using the three computation schemes presented. The determined turbulence coefficient ranged from 1 to 50 m^2/sec. Changes of k are caused primarily by its dependence on the velocity V of the geostrophic wind and the vertical temperature gradient γ. Orig. art. has: 15 formulas, 3 figures and 1 table.

ACCESSION NR: AT4018985

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut, Kiev (Ukrainian Hydrometeorological Scientific Research Institute)

SUBMITTED: 00 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: AS NO REF SOV: 006 OTHER: 000

Card 3/3

ACCESSION NR: AT4028747 S/2531/63/000/144/0088/0095

AUTHOR: Vorontsov, P. A.; Galadzhiy, N. M.; Konstantinov, A. R.

TITLE: Investigation of the distribution of certain structural characteristics of the vertical air flow

SOURCE: Leningrad. Gl. geofiz. observ. i Ukr. n.-i. gidrometeorol. inst. Trudy*, no. 144/40, 1963. Fizika pogranichnogo sloya atmosfery* (physics of the atmospheric boundary layer); Dneprovskaya expeditsiya GGO i UkrNIGMI, 88-95

TOPIC TAGS: Karman constant, wind velocity, turbulence, thermoanemograph

ABSTRACT: Distribution of pulsations of the horizontal and vertical components of wind velocity, the horizontal and vertical expansion of atmospheric turbulence, the Karman constant, and the values and the coefficient of turbulent exchange in the layer from 0.5 to 300 m is examined under various thermodynamic conditions. The structure of the air flows from an altitude of 0.5 m to altitudes of 300 m were investigated in the joint expedition of GGO, UkrNIGMI and LGMI. In the lower layers 0.5 and 2.0 m altitude, the wind structure was investigated with the aid of a thermoanemograph, and in the upper layers, from 3 to 300 m, with an aid of a mechanical register of turbulent flow pulsations attached to a captive balloon. The dependences

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ACCESSION NR: AT4028747

of the horizontal expansion of vortexes and the dependence of the Karman constant on the altitude and temperature stratification of the atmosphere according to the thermoanemograph and the mechanical register are presented in a table. The dependence of the coefficient exchange on the altitude at various Richardson numbers and the temperature stratification of the atmosphere for various altitudes is presented in a graph; the authors draws the conclusion that if it is assumed that the value of the exchange coefficient in equilibrium stratification is unity, then the relative change in the intensity of the turbulent volume, dependent on the stratification of the atmosphere, is expressed more clearly at altitudes of 100, 200, and 300 m than at altitudes of 3.0 m. Consequently, with an increase of altitudes the effect of stratification increases. Orig. art. has: 4 figures, 3 tables and 4 formulas.

ASSOCIATION: Leningradskaya glavna geofizicheskaya observatoriya (Principle Geophysical Observatory of Leningrad)

SUBMITTED: 00 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: AS NO REF SOV: 014 OTHER: 008

Card 2/2

ACCESSION NR: AT4028748 S/2531/63/000/144/0096/0101

AUTHOR: Galadzhiy, N. M.; Melent'yeva, I. I.; Tkachenko, A. V.

TITLE: Determining the altitude of the atmospheric boundary layer by various methods

SOURCE: Leningrad. Gl. geofiz. observ. i. Ukr. n.-i. gidrometeorol. inst. Trudy*, no. 144/40, 1963. Fizika pogranichnogo sloya atmosfery* (physics of the atmospheric boundary layer); Dneprovskaya expeditsiya GGO i UkrNIGMI, 96-101

TOPIC TAGS: boundary layer, temperature sounding, wind sounding, Dnieper expedition, wind profile

ABSTRACT: In this paper the authors present results of determining the altitude of the boundary layer of the atmosphere according to temperature and wind sounding data during the Dnieper expedition. Formulas are derived which enabled the authors to plot the altitude dependence of the dynamic boundary layer on an x-value. The characteristics of the atmospheric boundary layer, according to the Dnieper expedition of 1961, are given in a table. The around-the-clock change of the boundary layer is plotted according to the derived formulas and is compared with the

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ACCESSION NR: AT4028748

experimental data. Orig. art. has: 2 figures, 2 tables and 11 formulas.

ASSOCIATION: Leningradskaya glavna geofizicheskaya observatoriya (Principle Geophysical Observatory of Leningrad)

SUBMITTED: 00 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: AS, MM NO REF SOV: 004 OTHER: 000

Card 2/2

L 10412-65 EWT(1)/FCC ASD(f)-2/AFETR/ESD(t) GW

ACCESSION NR: AT4046359 S/2599/64/000/041/0087/0094

AUTHOR: Galadzhiy, N. M.; Konstantinov, A. R.; Belousov, V. V.

B

TITLE: Results of an experimental investigation of the structural characteristics of air flow in the surface boundary layer of the atmosphere

SOURCE: Kiyev. Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut. Trudy*, no. 41, 1964. Voprosy* teplovogo i vodnogo balansa (Problems of heat and water balance), 87-94

TOPIC TAGS: atmospheric boundary layer, atmospheric turbulence, atmospheric stability, atmospheric boundary layer turbulence, air current structure, micrometeorology

ABSTRACT: In an effort to determine more precisely the mechanism of turbulent transfer, the Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut (Ukrainian Scientific Research Hydrometeorological Institute) conducted a study of the structural characteristics of turbulent air flow in the surface layer of the atmosphere.

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L 10412-65

ACCESSION NR: AT4046359

The dependence of the structural characteristics of turbulence and the coefficient of turbulent exchange on atmospheric temperature stratification and the height above the underlying surface were investigated. Variations in air turbulence (instantaneous values of the horizontal and vertical velocity components) and temperature were recorded by means of a low-inertia thermoanemograph whose design and operation are described in detail. A total of 176 10-minute recordings were made at 0.25, 0.50, 1.0, and 2.0 m. The results obtained showed that: 1) under very stable stratification conditions the average velocities of ascending vertical pulsations exceed those of descending vertical pulsations; 2) the vertical wind velocity to horizontal wind velocity ratio is about 0.5 at 1 m, and varies little and unevenly with different stratification conditions; 3) the coefficient of correlation between vertical and horizontal pulsations is almost independent of stratification, varying between 0.2 and 0.5 and averaging about 0.35; 4) the vertical extent of eddies increases with decreased stability of atmospheric stratification; 5) the effect of temperature stratification on the intensity of turbulent exchange decreases with proximity to the underlying surface. Orig. art. has: 2 figures, 5 formulas, and 2 tables.

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L 10412-65

ACCESSION NR: AT4046359

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut (Ukrainian Scientific Research Hydrometeorological Institute)

SUBMITTED: 00 ATD PRESS: 3116 ENCL: 00

SUB CODE: ES NO REF SOV: 009 OTHER: 005

Card 3/3

L 7052-66 EWT(1)/FCC GW

ACC NR: AT5028301 SOURCE CODE: UR/3133/65/000/008/0099/0102

AUTHOR: Galadzhiy, N. M. 44,55

ORG: Ukrainian Hydrometeorological Research Institute (Ukrainskiy n. - i. gidrometeorologicheskiy institut) 44,55

58
B+1

TITLE: Prandtl mixing length determined from temperature fluctuations

SOURCE: AN UkrSSR, Mezhduvedomstvennyy geofizicheskiy komitet. Informatsionnyy byulleten'. no. 8, 1965. Geofizika i astronomiya (Geophysics and astronomy), 99-102

TOPIC TAGS: turbulent flow, mixing length, temperature fluctuation, shear stress

ABSTRACT: The flow turbulence of lower atmospheric layers 12,44,55 is analysed briefly by using the concept of Prandtl's mixing length ℓ. According to this theory, the turbulent shear stress can be expressed by

$$\tau_{xz} = -\rho\overline{u'w'} = \rho l^2\left(\frac{d\bar{u}}{dz}\right)^2,$$

and the temperature fluctuations by

$$T' = l_T\frac{d\bar{T}}{dz},$$

where ℓ is the equivalent turbulent temperature mixing length. On the basis of some experimental data, it is shown that the mixing length determined from temperature

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L 7052-66

ACC NR: AT5028301

pulsations in the lower four meters of the atmospheric layer increases linearly with the altitude. This increase is shown to be independent of the atmospheric stratification. The author also argues that the Prandtl-Karman mixing length is equally applicable to large values of ℓ with a 16% modification in the empirical constant k, where $\ell = kz$. Orig. art. has: 10 equations and 1 figure.

SUB CODE: ME, ES/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 005

Card 2/2

GALADZHIY, N.M.

Prandtl's mixing length, as determined by temperature pulsations. Geofiz. i astron. no.8:99-102 '65.

(MIRA 19:1)

1. Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut.

SOLOMKO, V.P.; GALADZHIY, O.F.

Physical properties of the systems water - acetone - alcohols. Part 4: Refractive index, density, and specific volume of the system water - acetone - ethanol - butanol. Ukr. khim. zhur. 27 no.2:160-167 '61. (MIRA 14:3)

1. Kiyevskiy gosudarstvennyy universitet im. T. G. Shevchenko.
(Acetone) (Ethyl alcohol) (Butanol)

KHMEL'NITSKIY, R.Z.; AKHMEDOV, D.M.; GALANTER, I.A.

Kinetics of carbon dioxide reduction by carbon at high temperatures. Izv. AN Uz. SSR. Ser. tekh. nauk 9 no.2: 76-83 '65. (MIRA 18:8)

1. Moskovskiy ordena Lenina energeticheskiy institut.

GALAFUTNIK, Yeva Moiseyevna; ILYAKHINSKAYA, Klavdiya Nikolayevna; SHOR, Yakov Aleksandrovich; LEPESHKINA, N.I., redaktor; TSYPPO, R.V., tekhnicheskiy redaktor; RYBIN, I.V., tekhnicheskiy redaktor.

[Arithmetic lesson plans for class 4] Plany urokov po arifmetike; dlia 4 klassa. Izd 2-oe, perer. Moskva, Gos.uchebno-pedagog. izd-vo Ministerstva prosveshcheniia RSFSR, 1956. 150 p. (MIRA 9:6)
(Arithmetic--Study and teaching)

GALAGALI, R.J.

The corona pressure effect (Δp) and the thermionic analog of the Joshi effect (Δ i)$_T$ in hydrogen in a semi-ionizer. Chekhosl fiz zhurnal 13 no.9:692-698 '63.

1. Department of Chemistry, Banaras Hindu University, India.

GALAGAN, A.D.; KANEVSKIY, G.L., prof., doktor med.nauk, otv.red.

[Health resorts, sanatoriums, and rest homes of the Ukrainian S.S.R.] Kurorty, sanatorii i doma otdykha USSR. Khar'kov. Pt.2. [Crimea Province; bibliography of Russian literature 1920-1955] Krymskaia oblast'; bibliografiia otechestvennoi literatury 1920-1955 gg. (MIRA 14:1)

1. Kharkov. Derzhavna naukova medychna biblioteka. 2. Glavnyy bibliograf Khar'kovskoy gosudarstvennoy nauchnoy meditsinskoy biblioteki Ministerstva zdravookhraneniya USSR (for Galagan).

(BIBLIOGRAPHY--CRIMEA--HEALTH RESORTS, WATERING PLACES, ETC.)

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

Галаган И.

F

0

4865. USING EXHAUSE GASES IN BLAST FURNACES. Galagan, I. F. (Fromuishlennaya Energetika (Industrial Power), 1947, N .7, 12).

10.000kWh a day are being saved at the Chelyabinsk Iron Foundries by using waste gases for the blast furnaces. A diagram is given showing the arrangement of the gas mains.

COMMON ELEMENTS

COMMON VARIABLES INDEX

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AUTHOR INDEX

GALAGAN, I. I.

"New Disease of Transplanted Apple Seedling Roots," *Biulleten' VII Vsesoiuznogo S'ezda po Zashchite Rastenii v Leningrade 15-23 Noiabria 1932 Goda*, no. 8, 1932, pp. 19-20. 423.92 V96

SO: SIRA, SI 90-53, 15 December 1953

GALAGAN, I.Ye.; KORENBAUM, V.S.

Prospects for finding ores of agricultural importance in the Maritime Territory. Soob.DVFAN SSSR no. 15:3-7 '62. (MIRA 17:9)

1. Primorskoye geologicheskoye upravleniye.

DMITRIYEVA, A.I.; SHUSHKIN, A.A.; MIRONOV, K.M.; DERBENEV, S.I.;
GRANICHNOVA, Z.P.; OKUN', M.M.; MIKHAYLOVA, N.N.; ANDREYEV,
V.V.; MAKEYEV, V.S.; OSIPOVA, V.M.; L'VOVYY, V.S.;
SMIRNOV, G.N., nauchnyy sotr.; ZAIKIN, I.N.; TAL'NISHNIKH,
G.N.; MORKOVIN, V.A.; GALAGAN, V.A.; RAZUVAYEV, A.A., red.;
SOKOLOVA, V.Ye., red.; TRISHINA, L.A., tekhn. red.

[Manual on the industrial primary processing of flax]
Spravochnik po zavodskoi pervichnoi obrabotke l'na. Izd.2.,
perer. i dop. Moskva, Rostekhizdat, 1962. 755 p.
(MIRA 15:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut lubyanykh volokon (for Dmitriyeva, Shushkin, Mironov, Derbenev, Granichnova, Okun', Mikhaylova, Andreyev, Makeyev, Osipova). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut okhrany truda (for Smirnov). 3. Upravleniye zagotovk i pervichnoy obrabotki l'na Kalininskogo sovnarkhoza (for Zaikin, Tal'nishnikh, Morkovin, Galagan, L'vovyy).

(Flax) (Flax processing machinery)

DZYUBA, V.I.; GALAGAN, V.S. [Halahan, V.S.]; LASTOVENKO, V.A.

Technological charts for growing vegetables. Mekh. sil'. hosp. 12 no. 4:25-27 Ap '61. (MIRA 14:4)

1. Ukrains'ky naukovo-doslidnyy institut ovochivnitstva i kartopli.

(Vegetable gardening)

GOL'DBERG, K.M.; GEL'FANDBEYN, N.M.; FAL'KOVICH, M.M.; PRILUTSKAYA, N.V.;
Prinimala uchastiye: GALAGAN, Ye.M.

Automatic control of the process of alcoholysis in the manufacture of alkyd resins. Lakokras.mat. i ikh.prim. no.1:75-78 '60.
(MIRA 14:4)

(Alkyd resins) (Alcoholysis)

GOLIK, A.Z.; RYNDICH, N.A.; NUZHNYY, V.M.; GALAGAN, Yu.

Velocity of ultrasound and the compressibility of alcohol - acetone - water solutions. Ukr.khim.zhur. 28 no.4:506-510 '62. (MIRA 15:8)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko. (Alcohols) (Acetone) (Ultrasonic waves--Speed)

GALAGANENKO, Z.I., redaktor; SHOMKO, P.M., tekhnicheskiy redaktor.

[Initiative of leading people in Soviet commerce] Initsiativa peredovykh liudei sovetskoi torgovli. Moskva, Gostorgizdat, 1951. 47 p. [Microfilm] (MIRA 9:6)
(Retail trade)

ODINETS, Mikhail Semenovich, zhurnalist; GALAGANENKO, Z.I., red.;
KUZNETSOVA, G.I., tekhn.red.

[Hyngary of today] Vengriia etikh dnei. Moskva, Izd-vo
"Sovetskaia Rossiia," 1959. 50 p. (MIRA 12:9)
(Hungary--Description and travel)

MUSTAFINA, Fatyma Khamidovna; GALAGANENKO, Z.I., red.; TRIFONOV, B.V., red.; POPOV, N.D., tekhn.red.

[In the family of equal nations] V sem'e ravnopravnykh narodov. Moskva, Izd-vo "Sovetskaia Rossiia," 1959. 53 p. (MIRA 13:4)

1. Zamestitel' predsedatelya prezidiuma Verkhovnogo Soveta RSFSR; ministr prosveshcheniya Bashkirskoy ASSR (for Mustafina).
(Bashkiria--Economic conditions)

GALAGANENKO, Z.I., red.; MAKAROVA, A.M., tekhn. red.

[Plastics of organic origin; testing methods]Plasticheskie massy organicheskogo proiskhozhdeniia; metody ispytaniia. Izd. ofitsial'noe. Moskva, Standartgiz, 1963. 70 p. (MIRA 16:3)
(Plastics—Standards)

GALAGANENKO, Z.I., red.; MEDVEDEV, L.Ya., tekhn. red.

[Flat gauges for dimensions from 1 to 500 mm.; specified dimensions (tables for calculations)] Kalibry gladkie dlia razmerov ot 1 do 500 mm; ispolnitel'nye razmery (tablitsy dlia podscheta). (MN 4554-63) Moskva, Izd-vo standartov, 1963. 71 p. (MIRA 17:4)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet standartov, mer i izmeritel'nykh priborov.

GALAGANENKO, Z.I., red.; TIMOFEYEVA, N.V., tekhn. red.

[Technical equipment of paint shops] Tekhnologicheskoe oborudovanie okrasochnykh tsekhov (RTM 55-62). Moskva, Standartgiz, 1963. 112 p. (MIRA 16:12)

1. Russia (1923- U.S.S.R.) Komitet standartov, mer i izmeritel'nykh priborov.
(Paint shops--Equipment and supplies)

GALAGANENKO, Z.I., red.

[Electric drive control desks] Pul'ty upravleniia elektroprivodami (MN 4148-62 - MN 4151-62). Moskva, Izd-vo standartov, 1964. 120 p. (MIRA 17:9)

1. Russia (1923- U.S.S.R.) Komitet standartov, mer i izmeritel'nykh priborov.

GALAGANENKO, Z.I., red.

[Components for pipelines subject to nominal pressure from 200 to 1000 kgf/cm^2; design and dimensions] Detali truboprovodov na P_u ot 200 do 1000 kgs/sm^2; konstruktsiia i razmery (MN 4969-63 - MN 5010-63). Moskva, Izd-vo standartov, 1964. 312 p. (MIRA 17:9)

1. Russia (1923- U.S.S.R.) Komitet standartov, mer i izmeritel'nykh priborov.

GNUSIN, ~~N.P.~~; NIKONOVICH, N.I.; GALAGANOV, V.A.

Experimental test of the validity of dimensionless group equations for electrical fields in electrolytes. Zhur.fiz.khim. 34 no.9:1911-1915 S '60. (MIRA 13:9)

1. Belorusskiy institut inzhenerov zheleznodorozhnogo transporta.
(Electrolytes) (Electric fields)

KOYDA, N.U., kand.tekhn.nauk; GALAGANOV, V.A., inzh.

Use of varistors in mathematical simulation of hydraulic networks.
Elektrichestvo no.12:68-70 D '62. (MIRA 15:12)

1. Belorusskiy institut inzhenerov zheleznodorozhnogo transporta.
(Hydraylic models)
(Hydraulic engineering—Electromechanical analogies)

KOYDA, Nikanor Ul'yanovich, kand. tekhn. nauk, dotsent; GALAGANOV, Vladimir Aleksandrovich, inzh.

Features of inverse electrical modeling of the hydraulic networks of pipelines. Izv. vys. ucheb. zav.; elektromekh. 6 no.10: 1172-1178 '63. (MIRA 17:1)

1. Zaveduyushchiy kafedroy gidravliki i teplotekhniki Belorusskogo instituta inzhenerov zheleznodorozhnogo transporta (for Koyda).
2. Zaveduyushchiy laboratoriyey kafedry gidravliki i teplotekhniki Belorusskogo instituta inzhenerov zheleznodorozhnogo transporta (for Galaganov).

Galaganova, A.S.

3879. PHYSICO-CHEMICAL PROPERTIES OF SOME COKING COALS FROM THE IRKUTSK BASIN. Larina, V.A. and Galaganova, A.S. (Izv. fiz.-khim. nauch.-issled. Inst. Irkutsk. Univ. [Bull. phys. chem. sci. res. Inst. Irkutsk Univ.], 1953, vol. 3, (1/2), 72-84; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1955, (21), 49996). Coals from five deposits were tested for solubility in phenol, naphthalene, pyridine oils and anthracene oils. The highest solubilities, some 100%, were recorded with anthracene oils. A relationship was established between cokability and the solubility, quantity and thermal stability of the liquid phase. An investigation of the swelling of the coals in acetone, pyridine and aniline, which depends on their micellar structure, also revealed a connection between the extent and speed of swelling and the cokability of the coals.

CIA

①

LARINA, V.A.; GALAGANOVA, A.S.; KASHTANOVA, A.Z.

Brown coals of the Irkutsk Basin. Izv. Fiz.-khim. nauch.-issl. inst. Irk. un. 4 no.2:31-41 '59. (MIRA 16:8)

(Irkutsk Basin—Coal—Analysis)

LARINA, V.A.; STRUGOV, A.S.; GALAGANOVA, A.S.; KASHTANOVA, A.Z.;
AZIMOVA, G.A.

Coals of the Kempendyay deposit, their composition and properties. Izv. Fiz.-khim. nauch.-issl. inst. Irk. un. 5 no.1:6-12 '61. (MIRA 16:8)

(Vilyuy Basin--Coal--Analysis)

OKLADNIKOV, V.P.; KLEPIKOVA, Ye.A.; GALAGANOVA, A.S.

Use of distillation and oxidation to bring about a change in the binding properties of heavy coal-tar products obtained by semi-coking of Cheremkhovo coals. Izv. Sib. otd. AN SSSR no.2:31-36 '62. (MIRA 16:10)

1. Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR i Irkutskiy gosudarstvennyy universitet, Irkutsk.

USSR/Physics - Quantum Electrodynamics Apr 52

"Radiative Corrections in Quantum Electrodynamics, I," A. D. Galagin

"Zhur Eksper i Teoret Fiz" Vol XXII, No 4, pp 448-461

Shows that taking Heisenberg's eqs as point of departure one can obtain operators for radiative corrections in a desired approximation expressed in a series of powers of e^2/hc. Rules for derivation of matrix elements agree with those obtained in the previous work by author ("Dok Ak Nauk SSSR" 79,222 1951)

215T82

Indebted to Acad L. D. Landau, Prof I. Ya. Pomeranchuk and V. B. Berestetskiy. Received 29 Aug 51.

215T82

GALAGIN, A.D.

GALAGIN, A.D.

USSR/Physics - Quantum Electrodynamics Apr 52

"Radiative Corrections in Quantum Electrodynamics. II," A. D. Galagin

"Zhur Eksper i Teoret Fiz" Vol XXII, No 4, pp 462-470

Generalizes method of previous work [see previous abstract] for cases where real photons are present and for problems of multiple electrons. Received 29 Aug 51.

215T83

GALAGUTSKIY, A.P.

Unusual case of multiple parasitic infection of the striated muscles. Vest.rent. i rad. no.2:89-91 Mr-Ap '55. (MLRA 8:5)

1. Iz rentgenologicheskogo otdeleniya Zelenodol'skogo bol'nichnopoliklinicheskogo ob'yedineniya No.1 TatASSR (glavnyy vrach--zasluzhennyy vrach RSFSR i TatASSR A.F.Vetoshkin) i kafedry rentgenologii (zav. prof. M.Kh.Fayzullin) Kazanskogo meditsinskogo instituta dlya usovershenstvovaniya vrachey.

(CYSTICERCOSIS,
musc., multiple, x-ray & differ. diag. from trichinosis)
(TRICHINOSIS,
multiple, x-ray & differ. diag. from musc. cysticercosis)
(MUSCLES, diseases,
cysticercosis, multiple, x-ray & differ. diag. from trichinosis)

GALAG'YAN, R. M.

"Testing of the Pathogenicity of Strains of Bact. Atrofaciens Under Laboratory Conditions", Dokl VASKhNIL, No. 11, 1941.

KAWENOKI-MINC, Elzbieta; KOZMINSKA, Anna; WOJCIK-SCISLOWSKA, Maria;
GALAJ, Weronika

Calcinosis. Reumatologia (Warsz.) 3 no.3:277-283 '65.

1. Z Instytutu Reumatologicznego (Dyrektor: dr. med. W. Brühl) i z Kliniki Dermatologicznej AM w Warszawie (Kierownik: prof. dr. med. S. Jablonska).

KAWENOKI-MINC, Elzbieta; GALAJ, Weronika

Polymyalgia rheumatica. Reumatologia (Warsz.) 3 no.3:291-294 '65.

1. Z Instytutu Reumatologicznego w Warszawie (Dyrektor: dr. med. W. Brühl).

GALAJDA, Pavel (Kosice)

Visit of Professor I.A.Vil'ner to Czechoslovakia. Mat fyz cas SAV 14 no. 2:161 '64.

GALAJDA, P.

Nomograms of some analytic functions. Sbor VST Kosice 1:21-34 '64.

1. Chair of Mathematics of the Higher School of Technology, Kosice Submitted March 26, 1963.

GALAJDA, Pavel, promovany matematik

Some nomograms for the calcultaion of analytic functions of the first nomographic class and the second nomographic genus of complex variables. Aplikace mat 9 no.2:131-148 '64

1. Katedra matematiky Vysokej skoly technickej, Kosice, Park J.A. Komenskeho 2.

GALAJDA, P.

Nomogram for functions of the first nomographic class of a complex variable. Acta r nat Univ Com 9 no.11:83-93 '64.

1. Chair of Mathematics of the Faculty of Mechanical Engineering of the Higher School of Technology, Kosice, Komenskeho 40.

L 33510-66 T IJP(c)

ACC NR: AP6023468 SOURCE CODE: CZ/0026/65/010/006/0489/0503

22

B

AUTHOR: Galajda, Pavel (Candidate of sciences)

ORG: Department of Mathematics, SF, VST, Kosice (Katedra matematiky SF VST)

TITLE: Transformations of nomograms of analytic functions of the first nomographic class and second genus

SOURCE: Aplikace matematiky, v. 10, no. 6, 1965, 489-503

TOPIC TAGS: analytic function, mathematic transformation, graphic technique

ABSTRACT: The article presents a solution of a problem for which a nomogram of the second genus with six variables is obtained. With it, for any pair of values of either of the given functions S or C, four further values can be read off on a straight line. [JPRS]

SUB CODE: 12 / SUBM DATE: 20Mar64 / ORIG REF: 004 / SOV REF: 009

Card 1/1 *gd*

0915

1428

(4)

CZECHOSLOVAKIA

SCHWEITZER, P., HILDEBRAND, T., KLVANOVA, H., GREGOROVA, J., GALAJDOVA, E., SIMKO, S., ; 1st. Internal Clinic, Medical Faculty, P.J.Safarik University (I. Interna Klinika Lek. Fak. UPJS), Kosice.

"Contribution to the Problem of the Relationship Between the Sympathoadrenal System and the Thyroid Gland."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 102

Abstract: 8 healthy subjects, 9 patients suffering from neurocirculatory asthenia, and 30 from thyrotoxicosis were used in an experiment to study the influence of blockage and tone increase of sympathicus on pulse frequency. The blockage resulted in a frequency decrease in the patients from 100 to 80-90, with no influence on controls. The orthostatic changes were in controls 77-91, in patients from 100 to 110-120. No references. Submitted at "16 Days of Physiology" at Kosice, 29 Sep 65.

1/1

USHAKOV, V., mayor; GALAK, N., mayor; SHCHERBOKOV, N., starshiy leytenant

Tank platton in separate reconnaissance patrols. Voon. vest. 39 no. 1:43-48 Ja '60. (MIRA 14:2)

(Military reconnaissance)

SHUL'GA, P.L.; GALAKA, A.I.

Carboniferous deposits in the northeastern slope of the Ukrainian crystalline shield. Geol.zhur.16 no.4:15-30 '56. (MLRA 10:2)
(Ukraine--Geology, Stratigraphic)

AUTHOR: Galaka, P.I. 21-58-5-8/28

TITLE: Application of the "Photoshade" Method to the Study of the Vibratory Motion of a System With Colliding Masses (Primeneniye fototenevogo metoda dlya issledovaniya kolebatel'nogo dvizheniya sistemy s soudaryayushchimisya massami)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 5, pp 502-504 (USSR)

ABSTRACT: The author has studied the dynamics of a two-mass oscillatory system in three versions: 1) a system with the two-sided restriction of the free motion of an inner mass, 2) a system with the two-sided restriction of the motion of an inner mass pressed by a spring to one limit, and 3) a system with the one-sided restriction of the motion of an inner mass. The study of motions has been carried out on a special test device which enabled the author to record displacement of the colliding masses by means of the photoshade method. The design and operation principle of the device applied is described in the article. Photograms obtained by this method make it possible to draw the graphs of displacements and velocities of the colliding masses and to establish the basic regularities in the motion of these systems.

Card 1/2

21-58-5-8/28

Application of the "Photoshade" Method to the Study of the Vibratory Motion of a System With Colliding Masses

There are 2 sketches, 1 photo, 1 photogram, and 5 Soviet references.

ASSOCIATION: Institut stroitel'noy mekhaniki AN UkrSSR (Institute of Construction **Engineering** of the AS UkrSSR)

PRESENTED: By Member of the AS UkrSSR, F.P. Belyankin

SUBMITTED: November 26, 1957

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Vibration--Mathematical analysis

Card 2/2

GALAKA, P.I. [Halaka, P.I.]

Vibratory motion of systems with colliding masses. Dop. AN URSR no.6:613-616 '58. (MIRA 11:9)

1. Institut stroitel'noy mekhaniki. Predstavil akademik AN USSR F.P. Belyankin [F.P. Bieliankin]
(Vibrations)

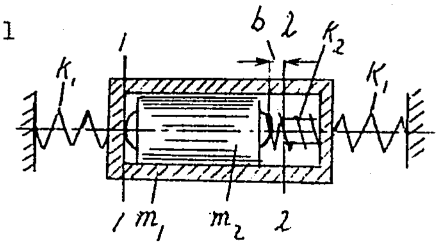
AUTHOR: Galaka, P.I. 21-58-7-6/27

TITLE: Certain Characteristics of the Oscillatory Motion of a System with Two Colliding Masses with Elastic Connection Between Them (Nekotoryye kharakteristiki kolebatel'nogo dvizheniya sistemy s dvumya soudaryayushchimisya massami pri nalichii uprugoy svyazi mezhdu nimi)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 7, pp 712-715 (USSR)

ABSTRACT: The article gives data on the effect of an elastic connection between colliding masses on the character of displacements of these masses and on the amplitude of the oscillations of the system, pictured in Fig. 1.

Figure 1



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21-58-7-6/27

Certain Characteristics of the Oscillatory Motion of a System with Two Colliding Masses with Elastic Connection Between Them

Three versions of the motion of such a system are possible: 1) m_2-mass does not come off m_1-mass, and the system moves without collisions of the masses; 2) m_2-mass comes off m_1-mass to a distance less than the gap b, and one-sided collisions take place at the plane 1 - 1; 3) m_2- mass separates from m_1-mass to a distance equal to the gap b, and two-sided collisions take place at the planes 1 - 1 and 2 - 2. This article deals with the two latter versions of forced oscillations of a system with a ratio of the masses

$$\mu = \frac{m_2}{m_1} = \frac{1}{3}$$

It has been established by performed experiments, that with oscillation of the system under conditions of vibration and collision, the number of collisions of the masses per period increases as the spring k_2 is tightened. In the resonance domain, the spring k_2 increases the amplitude of oscillations

Card 2/3

21-58-7-6/27

Certain Characteristics of the Oscillatory Motion of a System with Two Colliding Masses with Elastic Connection Between Them

of the system, both with bilateral collisions of the masses and the unilateral ones. On increasing the gap, which leads to unilateral collisions, the amplitude of the oscillations decreases. The registration of displacements was carried out by the photoshade method described by the author in earlier papers (Ref. 2 and 3). There is 1 diagram, 1 photogram, 1 graph, and 4 Soviet references.

ASSOCIATION: Institut stroitel'noy mekhaniki AN UkrSSR (Institute of Construction Mechanics of the AS UkrSSR)

PRESENTED: By Member of the AS UkrSSR, F.P. Belyankin

SUBMITTED: January 16, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Oscillations--Theory 2. Mathematics--Applications

Card 3/3

SOV-21-58-8-4/27

AUTHOR: Galaka, P.I.

TITLE: On the Effect of Certain Factors on the Vibratory Motion of a System Carrying a Free Mass (O vliyanii nekotorykh faktorov na kolebatel'noye dvizheniye sistemy, nesushchey svobodnuyu massu)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 8, pp 817-820 (USSR)

ABSTRACT: The article presents data on the vibratory motion of a system consisting of a mass m_1 fastened on a spring and a free mass m_2 resting on the m_1-mass, when the free mass is detaching from the system. This system is a simplified model of some mechanisms of the vibratory type, such as screens, conveyers, grinding machines, etc. In the process of investigation, the effect of the material of the masses and other pertinent factors were studied. It turned out that collision of steel with steel is characterized by multiple rebounds. The collision of steel masses with a rubber lining or with the replacement of the monolithic mass m_2 by a mass of the same magnitude consisting of steel balls may give rise to collisions without multiple rebounds. The beginning of vibration-impact conditions with a rise in frequency and the end of them with a

Card 1/2

SOV-21-58-8-4/27

On the Effect of Certain Factors on the Vibratory Motion of a System Carrying a Free Mass

fall in frequency are characterized by intermittent changes in the amplitude value. The system has the property of prolonging the vibration impact conditions to lower values of the frequency.
There is 1 schematic diagram, 1 photogram, 1 graph and 4 Soviet references.

ASSOCIATION: Institut stroitel'noy mekhaniki AN UkrSSR (Institute of Construction Mechanics of the AS UkrSSR)

PRESENTED: By Member of the AS UkrSSR, F.P. Belyankin

SUBMITTED: February 22, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Vibration mechanisms--Motion 2. Vibration mechanisms 3. Vibration --Theory

Card 2/2

GALAKA, P.I. [Halaka, P.I.]

Experimental investigation of vibroimpact oscillation conditions [with summary in English]. Dop.AN URSR no.12:1305-1307 '58.
(MIRA 12:1)

1. Institut stroitel'noy mekhaniki AN USSR. Predstavil akademik AN USSR F.P.Belyankin [F.P.Bieliankin]
(Vibration)

GALAKA, P. I., Candidate Tech Sci (diss) -- "Investigation of vibro-shock systems of movement in connection with the operation of machine centers". Kiev, 1959. 13 pp (Acad Sci Ukr SSR, Inst of Structural Mech), 150 copies (KL, No 24, 1959, 135)

GALAKA, P.I. [Halaka, P.I.] (Kiyev)

Determining the coefficient of the recovery of speed in case of collisions. Prykl.mekh. 6 no.4:451-454 '60. (MIRA 13:11)

1. Institut mekhaniki AN USSR.
(Impact)

GALAKA, P. I.

27331
S/021/61/000/002/005/013
D210/D303

24.4200 1327 2808, 1109

G
AUTHOR: Halaka, P.Y

TITLE: On the effect of the collision of masses on the resonance characteristics of an oscillatory system

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 2, 1961, 161 - 164

TEXT: Results of experiments on the system shown on Fig. 1 are $\mu = m/M$ is the ratio of masses of the bodies 1 and 2, b the gap between the colliding masses. The amplitude of the oscillations of the housing 2 was measured with the aid of a microscope. Resonance curves for the horizontal position of the system are shown on Fig. 2, the amplitude of excitation being 0.04 mm for all three cases. To estimate the effect of collisions, the resonance curve was taken first with the body being clamped i.e. with b = 0. When b was small there were frequent collisions between 1 and 2 during one period of oscillation. When b increased the number of colli-

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sions diminished and the resonance amplitude decreased perceptibly. At a certain value of b (denoted by b_{opt}) the oscillation regime was stationary with two collisions during one period. At $b > b_{opt}$ the collisions were non-periodical and there were sharp changes of amplitude. The shaded area on Fig. 2 corresponds to the frequency interval in which unstable collisions were observed and to the amplitudes of vibration of the housing observed during the unstable regime. If $b \approx b_{opt}$ the curve can have a resonance peak (in presence of collisions) or no peak (no collisions being present). This can be seen on Fig. 2a (b_{opt} = 1.2 mm at excitation amplitude = 0.04 mm). When the frequency was increased or decreased the system passed through the domain of resonance either along the curve b = 1, 2. If b is large the resonance properties of the system disappear almost entirely, no new resonances appearing in other frequencies. To adjust the system for maximum damping b must be made about 15 - 20 % larger than b_{opt}. There are 2 figures and 4

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Soviet-bloc references.

ASSOCIATION: Instytut mekhaniky AN URSR (Institute of Mechanics, AS UkrSSR)

PRESENTED: by Academician UkrSSR, F.P. Belyankin

SUBMITTED: April 21, 1960

Fig. 1.

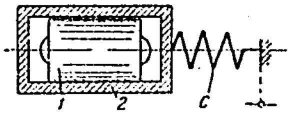

Рис. 1.

Card 3/4

GALAKA, P Y

25108
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D264/D303

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24.4100

AUTHOR: Halaka, P.Y. (Kyyiv)

TITLE: On investigating the oscillatory motion of a two-mass system in the presence of collisions

PERIODICAL: Prykladna mekhanika, v. 7, no. 3, 1961, 258 - 265

TEXT: The author points out the great attention given in recent years to vibropercussive states of motion in mechanical systems, especially the oscillatory states accompanying periodic or quasi-periodic collisions of rigid bodies, and describes the result of investigating the oscillatory motion of one characteristic system of this type. The apparatus used is shown in Fig. 1, and consists of two masses M and m, a spiral spring k which holds the masses together and plane springs c. The system is strengthened by a vibrostole B, whose oscillatory motion yields a mechanical drive through the eccentric E. The rectilinear motion of the vibrostole is ensured by a system of flexible guides H. Plates Π_m, Π_M are

Card 1/6

fixed to m and M respectively. M is called the case of the system and m the piston. In the oscillatory motion, contact occurs between the steel plate of the case and the spherical surface of the steel piston. By changing the rigidity of the spring it is possible to eliminate collision between the piston and the upper surface of the case, and in the subsequent argument this is always supposed done. The experiment is carried out with varying ratios m:M from 0.1 to 0.3, with different values of amplitude, varying rigidities of the springs c and k and various pressures of the piston on the case. Amplitude was measured with an accuracy of 4 - 6 %. The conditions for resonance are then considered, for a stable system of forced oscillations with periodic impact of the masses, with one impact per oscillation, (there being no upper impacts). The displacement of the case is considered to be approximately harmonic. The energy equation is

$$\triangle E = \frac{Mm}{M + m}(v_1 - u_1)^2 \frac{1 - R^2}{2}, \qquad (1)$$

where v and u are the velocities of the case and piston respective-

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ly, and R is the coefficient of restitution, $0 < R < 1$. The velocities after impact are given by

$$v_2 = \frac{(M - Rm)v_1 + m(1 + R)u_1}{M + m}, \qquad (2)$$

and

$$u_2 = \frac{(m - RM)u_1 + M(1 + R)v_1}{M + m}. \qquad (3)$$

The system of oscillations is stationary if and only if $u_2 = - u_1$. For the stationary value, there will be conservation of energy

$$\triangle W_- = \triangle W_+. \qquad (10)$$

It is shown from this that in the resonance case, when the phase angle between the displacement of the vibrostole and the case is given by $\varphi = \pi/2$, the energy influx is a maximum.

$$\triangle W_+ = \pi cea. \qquad (15)$$

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Hence the resonance amplitude for a system with one impact per oscillation is

$$a = \frac{2\pi ce}{\theta(M + m)\beta^2\omega^2}. \qquad (16)$$

Insofar as in resonance

$$\omega^2 = \frac{\text{[illegible]}}{M + m}$$

this may be written

$$a = \frac{2\pi e}{\theta\beta^2}. \qquad (17)$$

The exact result is

$$a = \frac{2\pi e}{\theta\beta^2 + \delta}, \qquad (20)$$

where δ is the logarithmic decrement of the damping of the system. The above results were tested by means of the apparatus described

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